



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/536,669	05/27/2005	Kazumi Nakayoshi	71,051-009	4704

27305 7590 12/04/2008  
HOWARD & HOWARD ATTORNEYS, P.C.  
THE PINEHURST OFFICE CENTER, SUITE #101  
39400 WOODWARD AVENUE  
BLOOMFIELD HILLS, MI 48304-5151

EXAMINER
----------

LOEWE, ROBERT S

ART UNIT	PAPER NUMBER
----------	--------------

1796

MAIL DATE	DELIVERY MODE
-----------	---------------

12/04/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/536,669

**Applicant(s)**

NAKAYOSHI ET AL.

**Examiner**

ROBERT LOEWE

**Art Unit**

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 October 2008.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 5,6,8-10 and 17-19 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 5,6,8-10 and 17-19 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/SI-08)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

Art Unit: 1796

**DETAILED ACTION*****Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(c), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(c) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/29/08 has been entered.

***Response to Arguments***

Applicant's amendments, filed in this request for reconsideration, effectively removes the previously relied upon prior art rejection of Kleyer et al. (US Pat. 6,361,716) since Kleyer et al. does not teach or suggest the addition of triazole-based compounds which is now required in independent claim 1.

***Claim Interpretation***

Independent claim 5 is drawn to a composition comprising a curable silicone composition and a silver-based powder surface treated with a triazole-based oxidation inhibitor. For purposes of examination, the limitation "surface-treated" will be given its broadest reasonable interpretation since no working definition is believed to be provided in the instant specification. Surface-treatment does not require that a chemical reaction takes place resulting in the formation of a covalent bond or a coordination complex. Physical attraction forces such as hydrogen bonding and van der Waals forces also constitute some level of surface treatment. Therefore,

Art Unit: 1796

both physi-sorption and chemi-sorption satisfy the limitation of "surface treated". The instant specification only seems to state "a chemical reaction with the oxidation inhibitor **may** be promoter if, in the presence of the oxidation inhibitor, mechanical energy is applied to the silver-based powder..." It seems that based on this teaching, a chemical reaction does not need to occur. With this in mind, it is the position of the Examiner that a prior art reference which teaches mixing a silicone-based composition comprising silver powder and a triazole-based compound would result in at least some level of surface interaction, or surface treatment, between the silver powder and triazole-based compound, thereby satisfying the limitations of instant claim 5.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 5-6, 8-10 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujiki et al. (US Pat. 6,140,446).

Art Unit: 1796

Claims 5, 8 and 9: Fujiki et al. teaches a curable silicone composition comprising (A) 100 parts by weight of an organopolysiloxane having at least two alkenyl radicals per polymer chain (4:63-65), (B) an organohydrogenpolysiloxane having from 0.4 to 20 moles of Si-H groups per mole of Si-alkenyl groups of component (A) (4:66-5:4), (C) from 0 to 800 parts of a filler which may be silver powder (7:38-46), (D) a platinum-based catalyst (5:5-8), and (E) an addition reaction retarder, which may include benzotriazole, which is taught to be preferably present from 0.001 to 5 parts by weight per 100 parts by weight of component (A) (7:23-37). Because several different fillers and addition reaction retarders are taught, Fujiki et al. is not believed to anticipate instant claim 5. However, Fujiki et al. renders obvious the composition of claim 5 since Fujiki et al. suggests that the filler may be silver and the addition reaction retarder may be benzotriazole. Also, while the Fujiki et al. does not teach that the benzotriazole is added as an oxidation inhibitor, it may nevertheless serve as such. Indeed, the purpose of addition reaction retarders is to prevent the oxidation of the platinum-based catalyst which starts the hydrosilation reaction between the organohydrogenpolysiloxane and the alkenyl-polysiloxane. Thus, the addition reaction retarders serve as oxidation inhibitors.

Claim 6: The instant specification teaches that the ingredients may be mixed mechanically using a roll mill (4:42-57).

Claim 10: Because Fujiki et al. renders obvious the composition of the instant claims, it follows the Fujiki et al. may be used in the manner as claimed in instant claim 10.

Claim 17: Fujiki et al. teaches that the amount of addition reaction retarder is preferably present from 0.001 to 5 parts by weight per 100 parts by weight of the alkenyl-polysiloxane (7:23-37). Fujiki et al. further teaches that there may be from 0 to 800 parts by weight of filler

Art Unit: 1796

per 100 parts by weight of component (A). So when the amount of filler and component (A) are at or near equivalency, the amount of addition reaction retarder based on the amount of filler falls within the range of instant claim 17.

Claim 18: Fujiki et al. teaches that from 0 to 800 parts by weight of silver powder may be present and that the amount of addition reaction retarder/oxidation inhibitor is small compared to the amount of silver powder (see claim 17). Therefore, Fujiki et al. also teaches the limitations of instant claim 18.

Claim 19: While Fujiki et al. does not explicitly teach that the silver-based powder is surface-treated with an oxidation inhibitor prior to the introduction into the composition, Fujiki et al. renders obvious the composition of instant claim 5. Claim 19 is a product-by-process claim. Product-by-process claims are based on patentability of the product itself and not to its method of production.

#### ***Relevant Art Cited***

The prior art made of record and not relied upon but is considered pertinent to applicants disclosure can be found on the attached PTO-892 form.

#### ***Potential Allowable Subject Matter***

The Examiner would like to point out that while all of Applicant's originally filed claims on 5/27/05 were rejected, the combination of originally filed claim 3 with step d) of the proposed claim below would overcome the prior art rejection of record. Additionally, none of the prior art

Art Unit: 1796

of record teaches or suggests a method of making a curable silicone composition in the manner of the proposed claim below.

**Proposed claim (steps a-c taken from originally filed claim 3):**

--A method for preparing a curable silicone composition comprising:

a) utilizing an organic solution of an oxidation inhibitor comprising a phenol-based or triazole-based compound as a lubricating agent,

b) applying mechanical energy to the silver-based powder,

c) subjecting the silver-based powder to surface treatment with the oxidation inhibitor,  
and

d) incorporating the surface-treated silver-based powder into a curable silicone composition.--

Specifically, the art of record which teaches a silicone composition comprising a curable silicone resin, a crosslinking agent, a platinum catalyst, and silver filler which additionally comprises a phenol or triazole-based additive do not teach or suggest the method of preparing a curable silicone composition in the manner as proposed. Further, the proposed amendment does not limit the oxidation inhibitor to only triazole-based compounds but can be expanded in scope to include phenol-based oxidation inhibitors as originally filed. Applicants are invited to contact the Examiner at the number below to further discuss any proposed amendments. Applicant's are of course welcome to argue the instant claims as it pertains to the prior art rejection above. However, it is believed by the Examiner that a showing that pre-mixing the silver powder with the oxidation inhibitor yields a composition which is different than one in which all of the ingredients are co-blended would be required to overcome the art rejection of record since the

Art Unit: 1796

claims are directed to either product or product-by-process claims. Such claims are directed to the product itself.

*Correspondence*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Loewe whose telephone number is (571)270-3298. The examiner can normally be reached on Monday through Friday from 5:30 AM to 3:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-13021302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. L./  
Examiner, Art Unit 1796  
2-Dec-08

/Randy Gulakowski/



Application/Control Number: 10/536,669

Page 8

Art Unit: 1796

Supervisory Patent Examiner, Art Unit 1796